

Sustainable Transition: Bio- or Technology-based Economy?

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“Will mankind listen to any program that implies a constriction of its addiction to exosomatic comfort? Perhaps, the destiny of man is to have a short, but fiery, exciting and extravagant life rather than a long, uneventful and vegetative existence” (Nicholas Georgescu-Roegen, 1972).

We live in the pressing time of the Anthropocene, facing major environmental instability if we do not establish a radical turn in our global behaviour. The foremost strategy of the European Commission is to transit into a ‘Bio-Based Economy’ (BBE). The idea of a BBE is to change our modes of economic life into sustainable variants, inspired by and founded upon ecological processes.

Vivien et al (2019: 189-190) identified three Types of bioeconomy currently developed. The most practiced and conceptually dominant Type is the ‘Science(/Knowledge)-Based Economy’, which is focussed on technological innovation as a key solution to the ecological crisis. Closely connected to contemporary tendencies, this BBE-Type seeks to maintain traditional economic growth as well as general comfort and consumption and puts its hopes in potential, future projects (Birch et al, 2010: 2903f).

However, it is highly questionable whether *techne* (τέχνη), artificiality, can in fact become the driving force and precondition of a true bioeconomy, operating within the fragile balance of the Earth’s carrying capacity. Was not technology (through agriculture, industry, etc.) not also a major *cause* of climatic instability? Is not technology somehow opposed to ecological principles of naturality? Does not innovation also always bring forth unsustainable applications of technology? Is not this tendency to technical control symptomatic of a specific political-economic context?

In our paper, we ask after the possibility of conceiving a BBE which is truly founded upon ecosystem-principles. To do so, we look into the concept of *biomimicry*, aiming to make a sensible connection between sustainable processes in nature and our capability of artificially reproducing these processes into ‘green innovations’. We argue a fundamental heterogeneity between bio-qua-nature-itself and synthetic manipulation should be carefully conserved if a consistent, effective BBE is to be established.